# Colorado State Technology Team Meeting Notes, March 14-15, 2006, Grand Junction, Colorado

Meeting convened at 12:30 pm at the Grand Junction FSC. Attendees were Andy Steinert, Jeff Koster, Jim Sperry, Rochelle Wimberly, Steve Jaouen, Jerry Archuleta, Joel Lee, Ryan Altenburg, Tom Weber, Barb Cencich, Charlie Pannebaker, Mike Wall, Paul Weber, Chris Mueller, Dave Ueda, Randy Randall, and Sandra Geer. Absent were Chris Pacheco and Marianna Young.

**IT Update** - Dave Ueda: ITS looking to replace some (not all) of 2001 Dell Optiplex workstations with next purchase. NRCS slated to get 15 HE workstations, 41 laptops, 11 tablets. Will be going to an open-ended purchase contract to allow purchases at any time as needs arise. GIS server has been delivered, setup and deployment is pending at this time. Currently maintaining 15 AutoCAD/Eaglepoint licenses for state. Tablet PC's will be deployed by end of April. The group discussed getting adequate computers set up for new employees and SCEPs. For SCEPS, who will be moved to different locations, we discussed possibly assigning computers to the person rather than the office.

GIS Update – Chris Mueller: GIS staff has moved from Soils to Water Resources, Frank Riggle is supervisor. They are working on a new program called Rapid Watershed Assessment Program, based on Oregon's model. Will create datasets profiling all of the 8-digit hydrologic watershed units. Data will be available on standby for use as needs arise, will allow quick response to emergencies. Purchased LIDAR data for Wray area (about 18 sq miles) to be used with studies for rehabilitation of Watershed dams. It is calibrated, in production, with delivery expected by end of March. State Office GIS server expected to provide terabyte storage online with access for ARC-T and limited others. Chris and Kristy F. will be receiving Toolkit training.

Web Team Update - Rochelle and Mike W.: An administrative electronic filing system has been developed and is ready to deploy for storage of NRCS electronic files. System uses same file coding system used for manuals and records as defined in General Manual. It will allow automatic copying of files down from state office to area and field offices. Field offices will have shortcut for access to their area office's file system. Question: Will it be searchable? Will pdf files be stored as image or text? Storage as an image does not allow a search for text strings. Ans: Mike will check into that issue. Rochelle has re-organized the Colorado NRCS employee intranet pages. PRS reports are now on webpage, as well as several other documents. There are categories for Technology, Toolkit, Protracts, PRS, etc. Viewed pages online and discussed. Also discussed the my.nrcs portal calendar and its uses within state. There is a form to be used to request additions to the calendar, Departments and Areas are required to post their items. Presentation of SNOTEL data has been reorganized on the Colorado webpage. Issue raised by Tom W. that we should have standardized templates for maps produced for the public. There are several requirements that need to be met for public information.

Technology updates will be included in all issues of Colorado Connection, the latest issue featured Steve J. and use of the iPAQ for field data collection uses. Members agreed to work on future articles, Ryan for Survey GPS, Chris M for use of LIDAR, Tom or Andy on PedonCE.

Discussion returned to Outlook calendaring. It is a Business Plan item to increase use of calendaring among personnel. Will be providing training and documentation on use of calendaring. Intent is to have Area Offices all using calendaring, to use it for meetings and scheduling. AC will consider how to implement at FO level.

**Engineering Update** – Ryan Altenburg: An Engineering Survey Equipment Budget & Procurement Plan has been developed and submitted to State Conservationist and others for approval. Plan addressed replacement as well as purchases for several years. Ryan provided copies of Plan to Team members. A list of standard engineering software applications used in the state has been assembled. These are all CCE approved packages and any or all can be installed at field offices as desired. Standard Drawings are currently low priority for funding. Work will be contracted out if budget permits. An alternative could be to use a SCEP to create, with each area allowed to pick 5-6 drawings each to be created. The Eaglepoint software contact is now Chad Kohlenberg (sp?), who replaced Ron Koppes. John Andrews is deciding how to distribute copies of Autodesk map software. Ryan relayed a question from John Andrews: What is the future of the Technology Team now that much of the Tech Plan has been implemented. Ans: The Tech Plan is a continuing document that has items added to it as needs are identified. The Tech Team is an ongoing effort as long as the State Conservationist deems it worthwhile and needed.

Leadership Team Update – Randy Randall: Budget for 2006 is neither good nor bad. Will have reduced staffing numbers through attrition to 295 PFT. Will have about 20-25 SCEP students later in year with about 4-6 per area. Area Office staff may be de-centralized with specialists being deployed closer to field operations. Core AO staff expected to be AC, AAC, ARC-T, AEng, and ARC-P. Dennis Alexander going to NM as State Conservationist, Dave Doty to be acting ASTC-P. Budget for Equipment purchases of about \$80,000 towards IT equipment. New initiatives are Energy Conservation and Invasive Species. Approach to funding these favors competitive grants. In technology arena, Allen Green interested in mobile office concepts. Rocky Mountain Engineering Team is being absorbed into Colorado staff.

Reviewed "Going Mobile" document which was created by Mike W. to provide guidance and background on mobile technology. Need to standardize models, platforms, operating systems for ease of support and training.

Randy R. stated that Outlook calendaring was in use at SO and is strongly encouraged for use by all personnel. May become mandatory soon. Discussed and demonstrated some features of Outlook calendar and how to share calendar with others.

**Soils Update** – Tom Weber: Soil Data Viewer 5.0 is now a NEDC course, 2 sessions per year with ArcGIS and SDV 5.0 used to produce detailed, stacked thematic maps. Windows Pedon software will be available to PDA and tablet PC's soon.

**Microsoft Project Update** – Jeff Koster: He has been testing software since beginning of year. It is very task oriented. Looking at use of Project and other technologies with EWP work, i.e., fillable forms on pda, etc., to expedite work in time critical situations.

**Range / PDA Update** - Steve Jaouen: Windows GSAT now available for rangeland planning. It is a very powerful application. Toolkit now creates a GSAT folder in the customer folder for GSAT data. GSAT stands for Grazing System Analysis Tool.

Wednesday, March 15th; 8:00 AM:

## State Technology Plan Review and Update:

#### Section I:

Items 1: Done

Item 3: DVD burner has been installed at Area 3 office, still needed for others. Dave U. will check into status.

Item 2,4: in progress

Item 5: WinPEST- someone said Sharkoff says this is in the works, but not ready to rollout yet. Field office members noted that this was a requirement for practice 595, EQIP contracting / planning and is a critical business need. Mike will ask Jeff and Jim S.

Item 6: Done as soon as it is posted to the Engineering website.

Item 7: In progress

Item 8: No progress yet, Chris M. says it will be done in September.

Item 10: No progress yet, Chris M. says it will be done in September.

Item 11: Policy is in development.

Item 12: Bluetooth cards are available and can be ordered.

[It was noted that a wireless policy is in effect now. Requires that users utilize a VPN account which can be requested through Ila Binard, SAO.]

#### Section II:

Item 1, 2: Done

Item 3: Combined with Toolkit

[Issue and discussion regarding slow performance of large color NAIP orthophotography. We need a means to clip only the areas we need for work. Some offices only service a small part of a county, but now must deal with the entire sid file]

Item 4: In progress

Item 5: AgLearn is the way to receive this training now. Randy will follow-up to provide information to users.

Item 6: In progress

Item 8: In progress, prototype available

Item 9: Jeff Koster and Jim Metz are testing.

# Section III:

Item 1: No info, check with Chris P.

Item 2: It's on the webpage, viewed it yesterday.

Item 3: Perhaps do a CACD convention and other meetings.

Item 4: Completed and ongoing.

Item 5: Do as opportunities arise.

Item 6: Do at CACD convention.

## Section IV:

Item 1: Done

Item 2: See handout from yesterday. AC/DC converters-needed capacity and portability.

- Item 3: Need the tablet first.
- Item 4: Need to get tablets deployed first.
- Item 5: Software to Tom W. and Charlie P who sent it to Las Animas. No report. Moved date to Sept 30<sup>th</sup>.
- Item 6: Need to know application recommendations. Mike will check into EWP possibilities.
- Item 7: Tom W. says 3D Mapper is in use, but the HD crashed and is awaiting for new computer with software re-installed.
- Item 8: LIDAR coming soon for Wray study noted earlier.

### Potential items for inclusion in Tech Plan:

Tom W. noted that Energy Audits are an up and coming item. He is on team developing strategies and methods for implementing energy conservation in state. There is a need for tools to measure savings in units of BTU and other ways. Also Comet VR is an item that addresses carbon sequestration and potential for trading carbon units in effort to curb global warming.

**Presentation:** Using ArcSDE at Mesa County, by Chris Kadel and Matt Heller. Chris and Matt work for Mesa County in GIS development. They have developed data and system to serve up county data over the internet using ArcSDE (Arc Spatial Data Engine). This is relevant to NRCS as we have much data we can serve up to the public. There could also be applications done within the agency to serve up data on demand to field offices and others.

**GIS Warehousing Options** – Chris Mueller: Wyoming has made arrangements with University of Wyoming to warehouse GIS data through the university's system. Works very well as NRCS can access data as needed while university does administration of data. Eliminates need to have redundant data stored on multiple servers. Would be very advantageous to us if we could work out a similar arrangement.

Lengthy discussion on data warehousing and options. We have lots of data duplicated over multiple servers because each office has needs for the same data layers in adjacent and nearby counties. Users need access to data for tracts of land that are outside their usual work areas.

Discussed fact that FSA is currently migrating to ArcSDE installed on the FSC CCE servers for use in maintaining the CLU layer data. Could that be adapted to serve up data internally to other FSC offices? The typical data that most offices need are orthophotograhy, soils, CLU, and possible the PLS layers. If that is not an option, could we use the GIS server that is not yet deployed to serve up the data?

**Action I tem for Chris M**.: He will research these possible strategies and existing sources of data that are currently served up over the internet that we could use.

## Additional Items for Tech Plan:

1.) Future lease of copy machines should require that copier be networkable, and possible all-in-one units that copy, fax, and scan. We could reduce the number of printers in an office with these units. Dave U will follow-up.

- 2.) 12 volt converter / inverters for charging and powering devices in the field. These could be used for survey equipment, gps, laptops, portable printers. Need to have adequate capacity. Ryan Altenburg agreed to research this issue.
- 3.) Offices need GIS capability to clip raster images. Chris M will investigate.
- 4.) Investigate possible field use of the recently released Origami UMPC.

# Next Meeting: May 31 - June 1 in Area 3.

Facilitator: Jeff Koster

Note keeper: Marianna Young Host: Charlie Pannebaker

Meeting Adjourned at Noon, March 15<sup>th</sup>.